# THE OFFICE OF REGULATORY STAFF DIRECT TESTIMONY AND EXHIBITS

**OF** 

MICHAEL R. CARTIN

**MARCH 6, 2012** 



**DOCKET NO. 2012-2-E** 

**Annual Review of Base Rates for Fuel Costs of South Carolina Electric & Gas Company** 

DIRECT TESTIMONY AND EXHIBITS OF 1 2 MICHAEL R. CARTIN ON BEHALF OF 3 4 THE SOUTH CAROLINA OFFICE OF REGULATORY STAFF 5 **DOCKET NO. 2012-2-E** IN RE: ANNUAL REVIEW OF BASE RATES FOR FUEL COSTS 6 7 OF SOUTH CAROLINA ELECTRIC & GAS COMPANY 8 9 Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND OCCUPATION. 10 My name is Michael Cartin. My business address is 1401 Main Street, Suite 900, Α. 11 Columbia, South Carolina 29201. I am employed by the State of South Carolina as an 12 Electric Utilities Specialist in the Electric Department for the Office of Regulatory Staff 13 ("ORS"). PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE. 14 Q. 15 I received a Bachelor of Science Degree from the University of South Carolina in Α. 16 May 2008. I joined ORS in November 2008 as an Electric Utilities Specialist. WHAT IS THE PURPOSE OF YOUR TESTIMONY? 17 Q. 18 The purpose of my testimony is to set forth ORS Electric Department's findings Α. 19 and recommendations resulting from our examination and review of South Carolina Electric & Gas Company's ("SCE&G" or "Company") fuel expenses and power plant 20 21 operations used in the generation of electricity to meet the Company's retail customer 22 requirements. The review period includes the actual data for January 2011 through

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December 2011, estimated data for January 2012 through April 2012, and forecasted data for May 2012 through April 2013.

# Q. WHAT AREAS WERE ENCOMPASSED IN YOUR REVIEW OF THE COMPANY'S FUEL EXPENSES AND PLANT OPERATIONS?

ORS examined various fuel and performance related documents as part of its review. The information reviewed addressed various electric generation and power plant outage and maintenance activities. In preparation for this proceeding, ORS analyzed the Company's monthly fuel reports including power plant performance data, unit outages and generation statistics. ORS evaluated contracts for nuclear fuel, coal, natural gas, fuel oil, transportation, ammonia and limestone. ORS also evaluated the Company's policies and procedures for fuel procurement. All information was reviewed with reference to the Company's existing Adjustment for Fuel and Variable Environmental Costs Rider and the Fuel Clause statute.

# Q. WHAT ADDITIONAL STEPS WERE TAKEN IN ORS'S REVIEW OF THE COMPANY'S PROPOSAL IN THIS PROCEEDING?

Numerous meetings were held with SCE&G personnel representing a variety of areas of expertise to discuss and review the Company's coal, natural gas, fuel oil, and nuclear fuel procurement; fuel transportation; environmental costs and compliance procedures; nuclear, fossil and hydro generating plant performances; plant dispatch; forecasting; and general Company policies and procedures. These meetings occurred at ORS offices as well as SCE&G headquarters in Cayce, S.C. In addition, ORS keeps abreast of the nuclear, coal, natural gas, and transportation industries through industry and governmental publications. During the review period, ORS attended the Nuclear

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1	Regulatory Commission ("NRC") annual inspection meeting for the V.C. Summer
2	nuclear generation station. ORS also conducted an on-site visit of the Williams coal-fired
3	station.

#### Q. DID ORS EXAMINE THE COMPANY'S PLANT OPERATIONS FOR THE 5 **REVIEW PERIOD?**

Yes. ORS reviewed the performance of the Company's generating facilities to determine if the Company made reasonable efforts to minimize fuel costs. ORS also reviewed the availability and capacity factors of the Company's individual generating units. Exhibit MRC-1 shows in percentages the monthly availability factors of the Company's major generating units. The corresponding capacity factors in Exhibit MRC-2 indicate the monthly utilization of each unit in producing power. All plants operated with availability factors that are comparable to previous reporting periods. The coal and nuclear capacity factors were also comparable with previous reporting periods. However, ORS did observe an increased utilization of the combined-cycle generating units. This increased utilization can be primarily attributed to the more recent competitiveness of natural gas prices.

#### Q. PLEASE EXPLAIN THE SIGNIFICANCE OF PLANT AVAILABILITY AND HOW IT IS USED IN ORS'S EVALUATION OF THE COMPANY'S PLANT PERFORMANCE.

Exhibits MRC-3 and MRC-4 show the summary of outages for the Company's major fossil and nuclear units for the review period. With reference to Exhibit MRC-1, months where generation units show zero availability, as well as those months showing less than 100% availability, led ORS to examine the reasons for such occurrences.

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	Exhibits MRC-1 through MRC-4 were used in the evaluation of the Company's plant
	operations. As an example, Exhibit MRC-1 shows that the Cope plant had 0.0%
	availability in the month of March 2011. Exhibit MRC-2 shows that the capacity during
	that same time period was also 0.0%. Exhibit MRC-3, page 1 of 2, indicates the reason
	for this as being the scheduled Spring outage between February 21, 2011 and April 1,
	2011; therefore, the unit was not available to generate electricity during this time frame
	due to these planned activities being performed.
Q.	PLEASE EXPLAIN HOW THE OUTAGES ARE REPRESENTED ON EXHIBITS
	MRC-3 AND MRC-4.
<b>A.</b>	Exhibit MRC-3 provides explanations for major fossil unit outages lasting 100

Exhibit MRC-3 provides explanations for major fossil unit outages lasting 100 hours or greater. While not all plant outages were included in this Exhibit, all outages were reviewed and found to be reasonable by ORS. Exhibit MRC-4 provides explanations for all outages at the V.C. Summer Nuclear Station during the review period.

# Q. PLEASE ADDRESS THE OUTAGES AT THE V.C. SUMMER NUCLEAR STATION.

Exhibit MRC-4 shows one forced outage and one scheduled refueling outage during the review period. ORS reviewed the outages as well as associated NRC documents, and determined that the Company responded appropriately during both outages. The V.C. Summer Nuclear Station operated efficiently with an actual availability factor of 87.5% and an actual capacity factor of 87.9% during the review period.

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# Q. WHAT WERE THE RESULTS OF YOUR ANALYSIS OF THE COMPANY'S POWER PLANT OPERATIONS FOR THE PERIOD UNDER REVIEW?

ORS's review of the Company's operation of its generating facilities during the review period revealed that the Company made reasonable efforts to maximize unit availability and minimize fuel costs.

# 6 Q. DID ORS REVIEW THE COMPANY'S GENERATION MIX DURING THE 7 REVIEW PERIOD?

Yes. Exhibit MRC-5 shows the percentage megawatt-hour ("MWH") generation mix by generation type for the review period. As shown in this Exhibit, the baseload coal and nuclear plants contributed 68% of the generation throughout the review period. The combined-cycle natural gas-fired plants contributed 28% of the generation. The remainder of the generation was met through a mix of combustion turbine, hydroelectric, and purchased power.

# 14 Q. DID ORS EXAMINE THE COMPANY'S FUEL COSTS ON A PLANT-BY15 PLANT BASIS FOR THE REVIEW PERIOD?

Yes. Exhibit MRC-6 shows the average fuel costs for the major generating plants on the Company's system for the review period and the MWHs produced by those respective plants. V.C. Summer generation statistics represents SCE&G's 2/3 ownership of the plant. The chart shows the lowest average fuel cost of 0.89 cents/kilowatt-hour ("kWh") at the V.C. Summer Nuclear Station and the highest average fuel cost of 4.82 cents/kWh at the Wateree coal-fired plant. The Company utilizes economic dispatch which generally requires that the lower cost units are dispatched first.

#### Q. HAS ORS REVIEWED THE ACCURACY OF THE COMPANY'S FORECAST?

1	<b>A.</b>	Yes. As shown in Exhibit MRC-7, the Company's actual MWH sales versus
2		estimated sales were 1.26% higher than expected during the review period. In addition
3		Exhibit MRC-8 shows the monthly variance between the actual and projected fuel costs
4		for the review period. This Exhibit shows the cumulative average actual fuel costs for the
5		period was 5.43% higher than the projected fuel costs.
6	Q.	WHAT OTHER INFORMATION HAS ORS REVIEWED AS PART OF ITS
7		EVALUATION IN THIS PROCEEDING?
8	A.	Exhibit MRC-9 shows ending period balances of fuel costs beginning in July
9		1979. The Company has experienced both under-recovery and over-recovery balances
10		throughout the approximate thirty-year period. As of December 2011, the Company had
11		a cumulative under-recovery of \$92,791,882.
12	Q.	WHAT OTHER SOURCES OF INFORMATION DOES ORS USE IN
13		DETERMINING THE REASONABLENESS OF A UTILITY'S REQUEST FOR A
14		FUEL COST COMPONENT?
15	A.	ORS routinely 1) reviews private and public industry publications as well as those
16		available on the Energy Information Administration's ("EIA") website; 2) conducts
17		meetings with Company personnel; 3) attends industry conferences; and 4) reviews fue
18		information as filed monthly by electric generating utilities with the Federal Government
19		An example of EIA data reviewed is included on Exhibit MRC-10. Exhibit MRC-10
20		provides uranium price data for the previous fifteen-year period and shows a significant
21		increase in the price of uranium since 2006.
22	Q.	WHAT IMPACT WILL THE PROPOSED DECREASE HAVE ON THE
23		TYPICAL AVERAGE MONTHLY BILL OF A RESIDENTIAL CUSTOMER?

1 **A.** The proposed fuel factor would decrease the average monthly bill for a residential customer on Rate 8 using 1,000 kWh from \$129.97 to \$129.76. This equate to a decrease of \$0.21 a month.

#### 4 Q. DOES THIS CONCLUDE YOUR TESTIMONY?

5 **A.** Yes, it does.

#### **Power Plant Performance Data Report - Availability Factors (Percentage)**

			His	torical D	ata					Reviev	v Period	(Actual)	) Data					
Plant	Unit	MW Rating	2009	2010	2011	Jan 2011	Feb 2011	Mar 2011	Apr 2011	May 2011	June 2011	July 2011	Aug 2011	Sep 2011	Oct 2011	Nov 2011	Dec 2011	Average Review Pd.
Canadys	1	90	87.2	75.6	73.1	84.5	76.1	74.1	93.5	92.4	91.4	100.0	100.0	90.4	75.1	0.0	0.0	73.1
Canadys	2	115	87.4	93.2	82.6	100.0	81.5	73.5	81.4	87.8	87.6	100.0	90.9	95.0	75.1	30.6	87.6	82.6
Canadys	3	180	79.6	63.0	72.6	83.9	84.3	79.2	80.7	81.8	100.0	97.9	98.4	42.2	0.0	27.1	96.0	72.6
Cope		415	96.4	94.1	87.4	100.0	72.6	0.0	89.9	100.0	100.0	100.0	99.0	100.0	100.0	86.7	100.0	87.4
McMeekin	1	125	63.7	94.7	92.9	100.0	100.0	100.0	39.1	100.0	86.4	97.2	100.0	91.9	100.0	100.0	100.0	92.9
McMeekin	2	125	87.7	80.6	91.5	100.0	100.0	81.6	48.7	96.2	95.5	96.0	100.0	100.0	95.6	88.8	95.4	91.5
Urquhart	3	95	71.4	92.7	86.1	100.0	100.0	63.1	100.0	94.6	100.0	100.0	100.0	100.0	91.8	0.0	83.2	86.1
Wateree	1	342	71.4	90.0	92.5	100.0	100.0	96.8	87.8	75.3	93.0	100.0	98.8	98.8	90.3	73.2	96.6	92.5
Wateree	2	342	91.7	90.1	93.7	92.7	98.8	100.0	51.3	99.2	100.0	100.0	100.0	100.0	100.0	86.5	95.6	93.7
Williams		605	86.0	74.7	61.3	90.6	86.6	67.5	92.7	96.3	100.0	90.9	100.0	9.8	1.4	0.0	0.0	61.3
<b>Coal Totals</b>		2,434	82.3	84.9	83.4	95.2	90.0	73.6	76.5	92.4	95.4	98.2	98.7	82.8	72.9	49.3	75.4	83.4
Jasper	1	158	94.9	76.4	96.7	100.0	100.0	81.9	100.0	100.0	99.0	98.2	100.0	100.0	100.0	81.3	100.0	96.7
Jasper	2	168	95.9	83.4	96.5	100.0	100.0	84.7	100.0	100.0	99.0	96.7	100.0	100.0	100.0	77.0	100.0	96.5
Jasper	3	151	88.9	84.5	95.2	98.8	99.8	92.0	100.0	100.0	99.0	96.9	100.0	100.0	100.0	78.5	77.7	95.2
Jasper	4	392	96.6	84.6	99.1	100.0	100.0	100.0	100.0	100.0	99.7	97.3	99.7	99.7	100.0	92.9	100.0	99.1
Urquhart	5	162	92.4	85.2	86.4	96.5	78.7	62.8	97.1	99.9	98.1	99.9	100.0	100.0	75.0	29.8	99.1	86.4
Urquhart	1	64	92.2	88.5	86.6	98.0	78.7	65.4	97.5	98.7	98.3	100.0	100.0	100.0	75.1	27.6	100.0	86.6
Urquhart	6	168	92.3	79.3	85.2	98.2	90.0	99.2	34.3	21.1	99.0	100.0	100.0	99.2	81.7	100.0	99.9	85.2
Urquhart	2	64	91.5	81.3	96.8	98.8	91.3	100.0	100.0	90.3	100.0	100.0	100.0	100.0	81.7	100.0	100.0	96.8
CC Totals <sup>1</sup>		1,327	93.1	82.9	92.8	98.8	92.3	85.8	91.1	88.7	99.0	98.6	100.0	99.9	89.2	73.4	97.1	92.8
V.C. Summer	1	966	81.7	99.1	87.5	93.2	100.0	100.0	49.9	7.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	87.5

<sup>&</sup>lt;sup>1</sup> CC designates Combined-Cycle units

#### **Power Plant Performance Data Report - Capacity Factors (Percentage)**

			1	Historic	al Data					1	Review	Period	(Actua	l) Data	!				
Plant	Unit	MW Rating	Life <sup>1</sup> Time	2009	2010	2011	Jan 2011	Feb 2011	Mar 2011	Apr 2011	May 2011	June 2011	July 2011	Aug 2011	Sep 2011	Oct 2011	Nov 2011	Dec 2011	Average Review Pd.
Canadys	1	90	n/a	38.7	39.9	46.6	70.4	46.1	0.0	20.9	83.4	85.1	91.8	82.8	78.4	0.0	0.0	0.0	46.6
Canadys	2	115	n/a	28.8	40.6	46.3	73.6	18.4	0.0	12.8	72.6	65.6	81.9	68.9	76.1	42.0	7.3	36.1	46.3
Canadys	3	180	n/a	29.0	40.3	45.5	61.1	22.2	40.1	29.1	76.0	89.5	84.7	84.8	0.0	0.0	22.2	36.3	45.5
Cope		415	n/a	69.3	74.4	67.4	78.9	41.1	0.0	69.6	83.7	82.1	83.3	75.9	81.3	71.5	68.9	73.1	67.4
McMeekin	1	125	n/a	38.3	70.9	54.3	71.3	55.0	68.9	25.9	64.6	51.1	58.1	62.0	32.8	34.5	68.2	59.1	54.3
McMeekin	2	125	n/a	50.0	60.3	55.6	72.3	56.2	49.1	36.5	60.9	59.6	60.4	61.6	71.2	50.8	55.4	33.6	55.6
Urquhart	3	95	n/a	47.7	47.8	49.0	61.0	46.4	26.2	67.2	73.1	71.8	72.7	63.6	52.4	36.3	0.0	17.4	49.0
Wateree	1	342	n/a	48.8	68.1	63.5	81.4	69.3	70.1	63.8	50.1	72.5	83.4	70.3	75.5	0.0	58.3	67.1	63.5
Wateree	2	342	n/a	61.3	66.8	69.2	61.4	64.7	72.1	36.3	75.5	80.6	82.8	75.1	79.1	72.9	63.9	65.4	69.2
Williams		605	n/a	72.5	66.3	51.6	70.6	67.4	52.0	81.7	85.9	90.5	75.1	87.9	8.4	0.2	0.0	0.0	51.6
<b>Coal Totals</b>		2,434	n/a	55.9	62.3	57.8	71.4	54.3	42.9	55.6	74.7	79.3	78.7	76.6	51.6	30.3	37.3	40.9	57.8
Jasper	1	158	n/a	66.6	57.2	79.2	72.3	75.9	64.2	87.8	87.9	71.6	79.8	82.1	82.6	90.1	71.9	84.6	79.2
Jasper	2	168	n/a	60.0	62.9	77.4	61.3	54.7	73.3	76.8	87.9	72.1	80.1	82.5	87.8	91.2	70.9	90.9	77.4
Jasper	3	151	n/a	62.7	64.0	74.2	55.2	54.9	70.5	87.1	89.4	70.2	71.2	76.7	89.1	96.8	66.8	63.2	74.2
Jasper	4	392	n/a	48.2	48.9	63.5	48.0	47.7	54.3	64.5	72.0	60.4	64.6	70.7	73.8	76.8	65.2	64.2	63.5
Urquhart	5	162	n/a	56.2	43.9	34.5	27.1	1.5	2.1	40.7	57.6	45.0	42.6	37.8	69.5	41.6	12.4	36.1	34.5
Urquhart	1	64	n/a	59.0	49.8	38.7	33.8	1.9	2.3	46.6	63.8	52.2	47.0	41.0	72.8	45.9	14.6	42.5	38.7
Urquhart	6	168	n/a	53.6	38.8	47.5	55.8	33.7	43.4	6.8	14.5	53.9	70.2	77.2	61.2	61.2	67.2	25.0	47.5
Urquhart	2	64	n/a	57.6	44.8	55.2	65.0	37.0	50.3	7.4	16.8	65.1	84.1	90.9	67.9	70.0	77.7	29.7	55.2
CC Totals		1,327	n/a	56.2	51.3	61.2	51.9	42.6	49.3	57.6	65.7	61.5	67.2	70.6	75.9	74.4	58.9	58.8	61.2
V.C. Summer	1	966	83.0	84.2	81.3	87.9	94.0	102.3	102.3	46.6	0.9	98.9	100.8	100.8	101.3	102.0	102.3	102.3	87.9

<sup>&</sup>lt;sup>1</sup> The lifetime nuclear unit capacity factor for V.C. Summer is through December 2011

### Fossil Unit Outage Report - 100 Hrs or Greater Duration

Unit	Date Offline	<b>Date Online</b>	Hours	Outage Type	Explanation of Outage
Canadys # 1	2/18/11	2/23/11	124.72	Planned	Unit was taken offline to repair boiler tube leaks.
Canadys # 1	3/14/11	3/18/11	104.00	Planned	Unit was taken offline due to a planned Spring outage.
Canadys # 1	10/24/11	12/31/11	1650.00	Planned	Unit was taken offline due to a planned Fall outage.
Canadys # 2	3/7/11	3/11/11	105.00	Planned	Unit was taken offline due to a planned Spring outage.
Canadys # 2	10/24/11	11/18/11	616.00	Planned	Unit was taken offline due to a planned Fall outage.
Canadys # 3	2/28/11	3/7/11	171.43	Planned	Unit was taken offline due to a planned Spring outage.
Canadys # 3	4/25/11	5/5/11	257.16	Maintenance	Unit was taken offline to repair boiler tube leaks.
Canadys # 3	8/31/11	9/11/11	267.37	Forced	Unit was forced offline due to clinker problems.
Canadys # 3	9/24/11	11/22/11	1421.37	Planned	Unit was taken offline due to a planned Fall outage.
Cope	2/21/11	4/1/11	940.22	Planned	Unit was taken offline due to a planned Spring outage.
McMeekin # 1	4/5/11	4/22/11	405.43	Planned	Unit was taken offline due to a planned Spring outage.
McMeekin # 2	3/26/11	4/16/11	494.20	Planned	Unit was taken offline due to a planned Spring outage.
Wateree # 1	10/29/11	11/9/11	265.57	Maintenance	Unit was taken offline to replace tubes.
Wateree # 2	4/2/11	4/16/11	350.97	Planned	Unit was taken offline due to a planned Spring outage.
Williams	3/21/11	4/3/11	294.08	Planned	Unit was taken offline due to a planned Spring outage.
Williams	9/3/11	10/28/11	1297.58	Planned	Unit was taken offline due to a planned Fall outage.
Williams	10/28/11	12/31/11 2	1549.85	Forced	Unit was forced offline to repair tube leaks and a Main Steam Line leak.

<sup>&</sup>lt;sup>1</sup> Canadys #1 completed this outage after the conclusion of the review period.

<sup>&</sup>lt;sup>2</sup> Williams completed this outage after the conclusion of the review period.

#### **Fossil Unit Outage Report - 100 Hrs or Greater Duration**

Unit	<b>Date Offline</b>	<b>Date Online</b>	Hours	Outage Type	Explanation of Outage
Jasper # 1	3/12/11	3/17/11	134.38	Planned	Unit was taken offline due to a planned Spring outage.
Jasper # 2	3/17/11	3/22/11	112.77	Planned	Unit was taken offline due to a planned Spring outage.
Jasper # 2	11/12/11	11/17/11	115.20	Planned	Unit was taken offline for a planned Fall outage.
Jasper # 3	11/26/11	12/2/11	144.40	Planned	Unit was taken offline for a Combustion inspection.
Jasper # 3	12/27/11	12/31/11 1	106.15	Forced	Unit was forced offline to replace combustor caps.
Urquhart # 1	2/17/11	2/22/11	126.75	Maintenance	Unavailable due to lockout for work on the LP Desuperheat Spray Valve.
Urquhart # 1	3/21/11	4/1/11	274.92	Planned	Unit was taken offline due to a planned Spring outage.
Urquhart # 1	10/24/11	11/22/11	698.00	Planned	Unit was taken offline due to a planned Fall outage.
Urquhart # 2	10/13/11	10/19/11	136.30	Planned	Unit was taken offline due to a planned Fall outage.
Urquhart # 3	3/9/11	3/20/11	274.32	Planned	Unit was taken offline to perform a chemical cleaning of the boiler.
Urquhart # 3	10/31/11	12/2/11	750.83	Forced	Unit was taken offline due to three support rods failing on the Economizer Gas Outlet Duct.
Urquhart # 5	2/17/11	2/22/11	126.75	Maintenance	Unit was taken offline to repair a leak in the LP Spray Valve.
Urquhart # 5	3/21/11	4/1/11	274.92	Planned	Unit was taken offline due to a planned Spring outage.
Urquhart # 5	10/24/11	11/22/11	691.15	Planned	Unit was taken offline due to a planned Fall outage.
Urquhart # 6	4/11/11	5/24/11	1045.43	Planned	Unit was taken offline due to a planned Spring outage.
Urquhart # 6	10/13/11	10/19/11	136.28	Planned	Unit was taken offline due to a planned Fall outage.

<sup>&</sup>lt;sup>1</sup> Jasper #3 Completed this outage after the conclusion of the review period.

### **Nuclear Unit Outage Report**

	V.C. Summer Nuclear Station													
<b>Date Offline</b>	Date Offline Date Online Hours Outage Type Explanation of Outage													
1/18/11	1/20/11	50.90	Forced	Unit was forced offline to repair the "C" RCP motor.										
4/15/11	5/31/11	1082.30	Planned	Unit was taken offline for Refueling Cycle 19.										

### **Generation Mix: January - December 2011**

Month			Pero	entage		
	Coal	Nuclear	Combined Cycle	Combustion Turbine	Hydro	Purchased Power
<u>2011</u>						
January	56	19	22	0	2	1
February	51	24	22	0	3	0
March	44	26	27	0	3	0
April	54	12	29	0	4	1
May	64	0	29	1	3	3
June	56	18	23	0	3	0
July	53	18	24	1	3	1
August	52	18	26	0	3	1
September	42	21	32	1	3	1
October	32	26	40	0	2	0
November	37	26	33	0	2	2
December	41	25	32	0	2	0
AVERAGE	49	19	28	0	3	1

#### **Generation Statistics for Major Plants: January - December 2011**

Plant	Fuel Type	Average Fuel Cost <sup>1</sup> (Cents/kWh)	Generation
V.C. Summer <sup>2</sup>	Nuclear	0.89	4,950,948
Jasper CC	Natural Gas	3.37	5,549,564
Williams	Coal	3.88	2,739,267
Urquhart	Coal	4.34	409,059
Cope	Coal	4.34	2,459,909
Urquhart CC	Natural Gas	4.35	1,747,600
Canadys	Coal	4.70	1,558,384
McMeekin	Coal	4.81	1,204,634
Wateree	Coal	4.82	3,973,744

<sup>&</sup>lt;sup>1</sup> The average fuel costs for coal-fired plants include oil and/or gas cost for start-up and flame stabilization.

<sup>&</sup>lt;sup>2</sup> Generation Statistics for V.C. Summer represents SCE&G's 2/3 ownership.

### SC Retail Comparison of Estimated to Actual Energy Sales

#### South Carolina Electric & Gas Company

Docket No. 2012-2-E

			2011												
		Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Period Average	
[1]	Estimated Sales (MWH)	2,147,300	1,835,800	1,690,500	1,546,000	1,602,000	1,969,500	2,091,400	2,158,200	2,012,200	1,707,100	1,573,200	1,749,700	22,082,900	
[2]	Actual Sales (MWH)	2,147,250	1,907,211	1,603,539	1,503,329	1,697,271	2,154,619	2,162,614	2,341,895	2,127,341	1,636,636	1,466,999	1,616,132	22,364,836	
[3]	Difference [1]-[2]	50	-71,411	86,961	42,671	-95,271	-185,119	-71,214	-183,695	-115,141	70,464	106,201	133,568	-281,936	
[4]	Percent Difference [3]/[2]	0.00%	-3.74%	5.42%	2.84%	-5.61%	-8.59%	-3.29%	-7.84%	-5.41%	4.31%	7.24%	8.26%	-1.26%	

### **SC Retail Comparison of Estimated to Actual Fuel Cost**

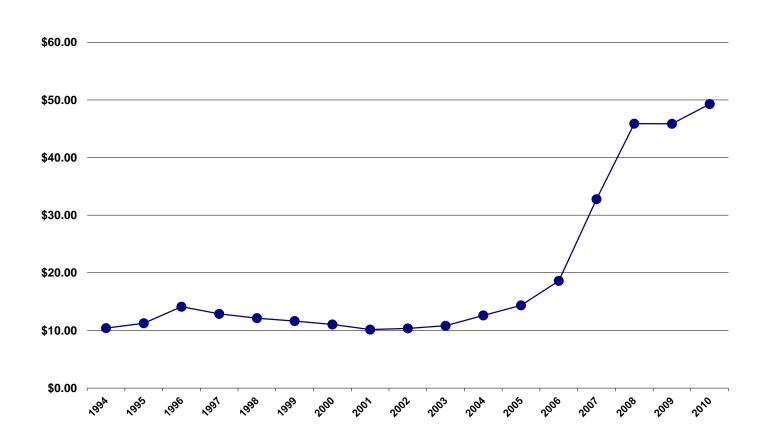
#### South Carolina Electric & Gas Company

Docket No. 2012-2-E

		2011												
		Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Period Average
[1]	Original Projection (¢/kWh)	3.7627	2.9178	2.9216	3.4565	4.0337	3.6650	3.6924	3.7633	3.2060	3.2427	3.6400	3.7169	3.5016
[2]	Actual Experience (¢/kWh)	3.7915	2.9152	3.2934	4.0526	4.9717	3.8667	4.1822	3.8669	3.2516	3.1457	3.6557	3.4403	3.7028
[3]	Amount in Base (¢/kWh)	3.6100	3.6100	3.6100	3.6100	3.5860	3.5860	3.5860	3.5860	3.5860	3.5860	3.5860	3.5860	3.5940
[4]	Variance from Actual [1-2]/[2]	-0.76%	0.09%	-11.29%	-14.71%	-18.87%	-5.22%	-11.71%	-2.68%	-1.40%	3.08%	-0.43%	8.04%	-5.43%

### **History of Cumulative Recovery Account Report**

DEDIOD	OVED (INDED)
PERIOD ENDING	OVER (UNDER) \$
	·
•	Fuel Adjustment in Effect
July-79	4,427,600
April-80	7,608,796
October-80	(462,050)
April-81	2,188,451
October-81	(10,213,138)
April-82	5,164,628
October-82	9,937,268
April-83	9,767,185
October-83	(4,527,441)
April-84	(2,646,395)
October-84	(3,211,158)
April-85	(9,545,054)
October-85	(6,115,435)
April-86	2,474,301
October-86	(540,455)
April-87	(353,393)
October-87	(3,163,517)
April-88	9,247,139
October-88	2,717,342
April-89	(5,665,737)
October-89	(8,777,726)
April-90	(5,288,612)
October-90	6,536,591
April-91	7,180,922
October-91	4,160,275
April-93	15,835,472
October-93	15,449,670
April-93	16,006,551
October-93	10,069,457
April-94	2,646,301
October-94	(265,302)
April-95	6,622,597
October-95	4,202,766
February-97	4,914,169
February-98	596,797
February-99	(1,303,094)
February-00	(124,599)
February-01	(60,454,498)
February-02	(16,421,821)
February-03	(17,429,464)
February-04	(20,532,126)
January-05	(23,979,198)
January-06	(54,743,186)
January-07	(52,562,505)
January-08	(28,848,155)
December-08	(130,199,721)
December-09	(89,477,296)
December-10	(72,832,265)
December-11	(92,791,882)
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Sources: U.S. Energy Information Administration: 1994-2002-Uranium Industry Annual reports. 2003-2010-Form EIA-858, "Uranium Marketing Annual Survey".